### **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:

Source:

Date Processed by STIC:

ENTERED



**IFWP** 

# RAW SEQUENCE LISTING DATE: 09/21/2006 PATENT APPLICATION: US/10/575,537 TIME: 11:48:13

Input Set : A:\1034123-000219.ST25.txt
Output Set: N:\CRF4\09212006\J575537.raw

```
3 <110> APPLICANT: Gallo, Richard
             Murakami, Masamoto
      6 <120> TITLE OF INVENTION: HUMAN CATHELICIDIN ANTIMICROBIAL PEPTIDES
      8 <130> FILE REFERENCE: 1034123-000219
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/575,537
     11 <141> CURRENT FILING DATE: 2006-04-11
     13 <150> PRIOR APPLICATION NUMBER: US 60/512,953
     14 <151> PRIOR FILING DATE: 2003-10-21
     16 <150> PRIOR APPLICATION NUMBER: PCT/US2004/034911
     17 <151> PRIOR FILING DATE: 2004-10-20
     19 <160> NUMBER OF SEQ ID NOS: 34
     21 <170> SOFTWARE: PatentIn version 3.3
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 11
     25 <212> TYPE: PRT
     26 <213> ORGANISM: Homo sapiens
     29 <220> FEATURE:
W--> 30 <221> NAME/KEY: X
     31 <222> LOCATION: (1)..(2)
     32 <223> OTHER INFORMATION: K or R
     34 <220> FEATURE:
W--> 35 <221> NAME/KEY: X
     36 <222> LOCATION: (3)..(3)
     37 <223> OTHER INFORMATION: I or K
     39 <220> FEATURE:
W--> 40 <221> NAME/KEY: X
     41 <222> LOCATION: (4)..(4)
     42 <223> OTHER INFORMATION: V or G
     44 <220> FEATURE:
W--> 45 <221> NAME/KEY: X
     46 <222> LOCATION: (5)..(5)
     47 <223> OTHER INFORMATION: Q or R
     49 <220> FEATURE:
W--> 50 <221> NAME/KEY: X
     51 <222> LOCATION: (6)..(6)
     52 <223> OTHER INFORMATION: K or R
     54 <220> FEATURE:
W--> 55 <221> NAME/KEY: X
     56 <222> LOCATION: (7)..(7)
     57 <223> OTHER INFORMATION: any amino acid
     59 <220> FEATURE:
W--> 60 <221> NAME/KEY: X
```

61 <222> LOCATION: (8)..(8)

DATE: 09/21/2006

TIME: 11:48:13

#### Input Set : A:\1034123-000219.ST25.txt Output Set: N:\CRF4\09212006\J575537.raw 62 <223> OTHER INFORMATION: L or F 64 <220> FEATURE: W--> 65 <221> NAME/KEY: X 66 <222> LOCATION: (9)..(11) 67 <223> OTHER INFORMATION: any amino acid 69 <400> SEQUENCE: 1 5 72 1 10 75 <210> SEQ ID NO: 2 76 <211> LENGTH: 11 77 <212> TYPE: PRT 78 <213> ORGANISM: Homo sapiens 80 <400> SEQUENCE: 2 82 Lys Arg Ile Val Gln Arg Ile Lys Asp Val Phe 83 1 10 86 <210> SEQ ID NO: 3 87 <211> LENGTH: 8 88 <212> TYPE: PRT 89 <213> ORGANISM: Homo sapiens · 一种, 建烷基。 91 <400> SEQUENCE: 3 93 Arg Lys Ser Lys Glu Lys Ile Gly 94 1 97 <210> SEQ ID NO: 4 98 <211> LENGTH: 8 99 <212> TYPE: PRT 100 <213> ORGANISM: Homo sapiens 102 <400> SEQUENCE: 4 104 Lys Ser Lys Glu Lys Ile Gly Lys 105 1 108 <210> SEQ ID NO: 5 109 <211> LENGTH: 739 110 <212> TYPE: DNA 111 <213> ORGANISM: Homo sapiens 113 <400> SEQUENCE: 5 114 taaaqcaaac cccaqcccac accctggcag gcagccaggg atgggtggat caggaaggct 60 116 cctgqttggg cttttgcatc aggctcaggc tgggcataaa ggaggctcct gtgggctaga 120 118 gggaggcaga catggggacc atgaagaccc aaagggatgg ccactccctg gggcggtggt 180 120 cactggtgct cctgctgctg ggcctggtga tgcctctggc catcattgcc caggtcctca 240 122 gctacaagga agctgtgctt cgtgctatag atggcatcaa ccagcggtcc tcggatgcta 300 124 acctetaceg ceteetggae etggaececa ggeceaegat ggatggggae ecagaeaege 360 126 caaagcctgt gagcttcaca gtgaaggaga cagtgtgccc caggacgaca cagcagtcac 420 128 cagaggattg tgacttcaag aaggacgggc tggtgaagcg gtgtatgggg acagtgaccc 480 130 tcaaccagge caggggetee tttgacatea gttgtgataa ggataacaag agatttgeee 540

132 tgctgggtga tttcttccgg aaatctaaag agaagattgg caaagagttt aaaagaattg

134 tocagagaat caaggatttt ttgcggaatc ttgtacccag gacagagtcc tagtgtgtgc

136 cctaccctgg ctcaggcttc tgggctctga gaaataaact atgagagcaa tttcaaaaaa

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/575,537

138 aaaaaaaaa aaaaaaaaa 141 <210> SEQ ID NO: 6 142 <211> LENGTH: 170 600

660

720 739

# RAW SEQUENCE LISTING DATE: 09/21/2006 PATENT APPLICATION: US/10/575,537 TIME: 11:48:13

Input Set : A:\1034123-000219.ST25.txt
Output Set: N:\CRF4\09212006\J575537.raw

```
143 <212> TYPE: PRT
144 <213> ORGANISM: Homo sapiens
146 <400> SEQUENCE: 6
148 Met Lys Thr Gln Arg Asn Gly His Ser Leu Gly Arg Trp Ser Leu Val
152 Leu Leu Leu Cly Leu Val Met Pro Leu Ala Ile Ile Ala Gln Val
                20 -
                                    25
                      . .
156 Leu Ser Tyr Lys Giu Ala Val Leu Arg Ala Ile Asp Gly Ile Asn Gln
                                40
160 Arg Ser Ser Asp Ala Asn Leu Tyr Arg Leu Leu Asp Leu Asp Pro Arg
                            55
164 Pro Thr Met Asp Gly Asp Pro Asp Thr Pro Lys Pro Val Ser Phe Thr
                        70
                                            75
168 Val Lys Glu Thr Val Cys Pro Arg Thr Thr Gln Gln Ser Pro Glu Asp
169
172 Cys Asp Phe Lys Lys Asp Gly Leu Val Lys Arg Cys Met Gly Thr Val
173
                100
                                    105
176 Thr Leu Asn Gln Ala Arg Gly Ser Phe Asp Ile Ser Cys Asp Lys Asp
                                                                         .17:7
                1 1 1 1 1 1 1 1
                                180 Asn Lys Arg Phe Ala Leu Leu Gly Asp Phe Phe Arg Lys Ser Lys Glu
        130
                            135
184 Lys Ile Gly Lys Glu Phe Lys Arg Ile Val Gln Arg Ile Asp Asp Phe
                        150
188 Leu Arg Asn Leu Val Pro Arg Thr Glu Ser
189
                    165
192 <210> SEQ ID NO: 7
193 <211> LENGTH: 519
194 <212> TYPE: DNA
195 <213> ORGANISM: Homo sapiens
197 <400> SEQUENCE: 7
198 atgcagttcc agagggacgt cccctccctg tggctgtggc ggtcactatc actgctgctg
                                                                           60
200 ctactgggcc tggggttctc ccagaccccc agctacaggg atgctgtgct ccgagctgtg
                                                                          120
202 gatgacttca accagcagtc cctagacacc aatctctacc gtctcctgga cctggatcct
                                                                          180
204 gagccccaag gggacgagga tccagatact cccaagtctg tgaggttccg agtgaaggag
                                                                          240
206 actgtatgtg gcaaggcaga gcggcagcta cctgagcaat gtgccttcaa ggaacagggg
                                                                          300
208 gtggtgaagc agtgtatggg ggcagtcacc ctgaacccgg ccgctgattc ttttgacatc
                                                                          360
210 agetgtaacg agectggtge acagecettt eggtteaaga aaattteeeg getggetgga
                                                                          420
212 cttctccgca aaggtgggga gaagattggt gaaaagctta agaaaattgg ccagaaaatt
                                                                          480
214 aagaattttt ttcagaaact tgtccctcag ccagagtag
                                                                          519
217 <210> SEQ ID NO: 8
218 <211> LENGTH: 173
219 <212> TYPE: PRT
220 <213> ORGANISM: murine
222 <400> SEQUENCE: 8
224 Met Gln Phe Gln Arg Asp Val Pro Ser Leu Trp Leu Trp Arg Ser Leu
225 1
228 Ser Leu Leu Leu Leu Gly Leu Gly Phe Ser Gln Thr Pro Ser Tyr
                                    25
232 Arg Asp Ala Val Leu Arg Ala Val Asp Asp Phe Asn Gln Gln Ser Leu
```

RAW SEQUENCE LISTING DATE: 09/21/2006
PATENT APPLICATION: US/10/575,537 TIME: 11:48:13

Input Set : A:\1034123-000219.ST25.txt
Output Set: N:\CRF4\09212006\J575537.raw

```
40
236 Asp Thr Asn Leu Tyr Arg Leu Leu Asp Leu Asp Pro Glu Pro Gln Gly
240 Asp Glu Asp Pro Asp Thr Pro Lys Ser Val Arg Phe Arg Val Lys Glu
                     70
244 Thr Val Cys Gly Lys Ala Glu Arg Gln Leu Pro Glu Gln Cys Ala Phe
                 85
                          90 ...,
248 Lys Glu Gln Gly Val Val Lys Gln Cys Met Gly Ala Val Thr Leu Asn
249 100
                          105
252 Pro Ala Ala Asp Ser Phe Asp Ile Ser Cys Asn Glu Pro Gly Ala Gln
253 115
                             120
256 Pro Phe Arg Phe Lys Lys Ile Ser Arg Leu Ala Gly Leu Leu Arg Lys
257 130 135
260 Gly Gly Glu Lys Ile Gly Glu Lys Leu Lys Lys Ile Gly Gln Lys Ile
261 145 150
264 Lys Asn Phe Phe Gln Lys Leu Val Pro Gln Pro Glu Gln
                  165
268 <210> SEQ ID NO: 9
269 <211> LENGTH: 172
                                 270 <212> TYPE: PRT
271 <213> ORGANISM: canine
273 <400> SEQUENCE: 9
275 Met Glu Thr Gln Lys Asp Ser Pro Ser Leu Gly Arg Trp Ser Leu Leu
279 Leu Leu Leu Gly Leu Val Ile Thr Pro Ala Ala Ser Arg Ala Leu
280 20
                                 25
283 Ser Tyr Arg Glu Ala Val Leu Arg Ala Val Asn Gly Phe Asn Gln Arg
                             40
287 Ser Ser Glu Glu Asn Leu Tyr Arg Leu Leu Gln Leu Asn Ser Gln Pro
                          55
291 Lys Gly Asp Glu Asp Pro Asn Ile Pro Lys Pro Val Ser Phe Thr Val
295 Lys Glu Thr Val Cys Pro Lys Thr Thr Gln Gln Pro Leu Glu Gln Cys
299 Gly Phe Lys Asp Asn Gly Leu Val Lys Gln Cys Glu Gly Thr Val Ile
                                105
303 Leu Asp Glu Asp Thr Gly Tyr Phe Asp Leu Asn Cys Asp Ser Ile Leu
304 115
                             120
307 Gln Val Lys Lys Ile Asp Arg Leu Lys Glu Leu Ile Thr Thr Gly Ala
                         135
311 Gln Lys Ile Gly Lys Lys Ile Arg Arg Ile Gly Gln Arg Ile Lys Asp
                     150
                                         155
315 Phe Leu Lys Asn Leu Gln Pro Arg Glu Glu Lys Ser
                  165
319 <210> SEQ ID NO: 10
320 <211> LENGTH: 172
321 <212> TYPE: PRT
322 <213> ORGANISM: porcine
324 <400> SEQUENCE: 10
```

RAW SEQUENCE LISTING DATE: 09/21/2006
PATENT APPLICATION: US/10/575,537 TIME: 11:48:13

Input Set : A:\1034123-000219.ST25.txt
Output Set: N:\CRF4\09212006\J575537.raw

326 Met Glu Thr Gln Arg Ala Ser Leu Cys Leu Gly Arg Trp Ser Leu Trp 327 1 330 Leu Leu Leu Ala Leu Val Val Pro Ser Ala Ser Ala Gln Ala Leu 2.0 334 Ser Tyr Arg Glu Ala Val Leu Arg Ala Val Asp Arg Leu Asn Glu Gln 338 Ser Ser Glu Ala Asn Leu Tyr Arg Leu Leu Glu Leu Asp Gln Pro Pro. 339 50 55 342 Lys Ala Asp Glu Asp Pro Gly Thr Pro Lys Pro Val Ser Phe Thr Val 346 Lys Glu Thr Val Cys Pro Arg Pro Thr Arg Gln Pro Pro Glu Leu Cys 85 90 350 Asp Phe Lys Glu Asn Gly Arg Val Lys Gln Cys Val Gly Thr Val Thr 100 105 354 Leu Asn Pro Ser Ile His Ser Leu Asp Ile Ser Cys Asn Glu Ile Gln 355 115 120 358 Ser Val Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro 359 130 135 140 362 Pro Pro Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe 363 145 150 160 155 366 Pro Pro Arg Phe Pro Pro Arg Phe Pro Gly Lys Arg 165 370 <210> SEQ ID NO: 11 371 <211> LENGTH: 176 372 <212> TYPE: PRT 373 <213> ORGANISM: goat 375 <400> SEQUENCE: 11 377 Met Glu Thr Gln Gly Ala Ser Leu Ser Leu Gly Arg Trp Ser Leu Trp 381 Leu Leu Leu Gly Leu Val Val Pro Leu Ala Ser Ala Gln Ala Leu 385 Ser Tyr Arg Glu Ala Val Leu Arg Ala Val Gly Gln Leu Asn Glu Arg 40 389 Ser Ser Glu Ala Asn Leu Tyr Arg Leu Leu Glu Leu Asp Pro Ala Pro 55 393 Asn Asp Glu Val Asp Pro Gly Thr Arg Lys Pro Val Ser Phe Thr Val 70 75 397 Lys Glu Thr Val Cys Pro Arg Thr Thr Gln Gln Pro Pro Glu Glu Cys 85 90 401 Asp Phe Lys Glu Asn Gly Leu Val Lys Gln Cys Val Gly Thr Val Thr 100 105 405 Leu Asp Pro Ser Asn Asp Gln Phe Asp Ile Asn Cys Asn Glu Leu Gln 120 409 Ser Val Arg Phe Arg Pro Pro Ile Arg Pro Pro Ile Arg Pro Pro 135 413 Phe Asn Pro Pro Phe Arg Pro Pro Val Arg Pro Pro Phe Arg Pro Pro 150 155 417 Phe Arg Pro Pro Phe Arg Pro Pro Ile Gly Pro Phe Pro Gly Arg Arg 165 170

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/21/2006 PATENT APPLICATION: US/10/575,537 TIME: 11:48:14

Input Set : A:\1034123-000219.ST25.txt
Output Set: N:\CRF4\09212006\J575537.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1/,2,1/5,6/,7/8/,9,1/8,1/1

#### VERIFICATION SUMMARY

DATE: 09/21/2006 TIME: 11:48:14

PATENT APPLICATION: US/10/575,537 TIME:

Input Set : A:\1034123-000219.ST25.txt
Output Set: N:\CRF4\09212006\J575537.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number L:30 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:35 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:40 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:45 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:50 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:55 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:60 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:65 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:65 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:65 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1 L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0